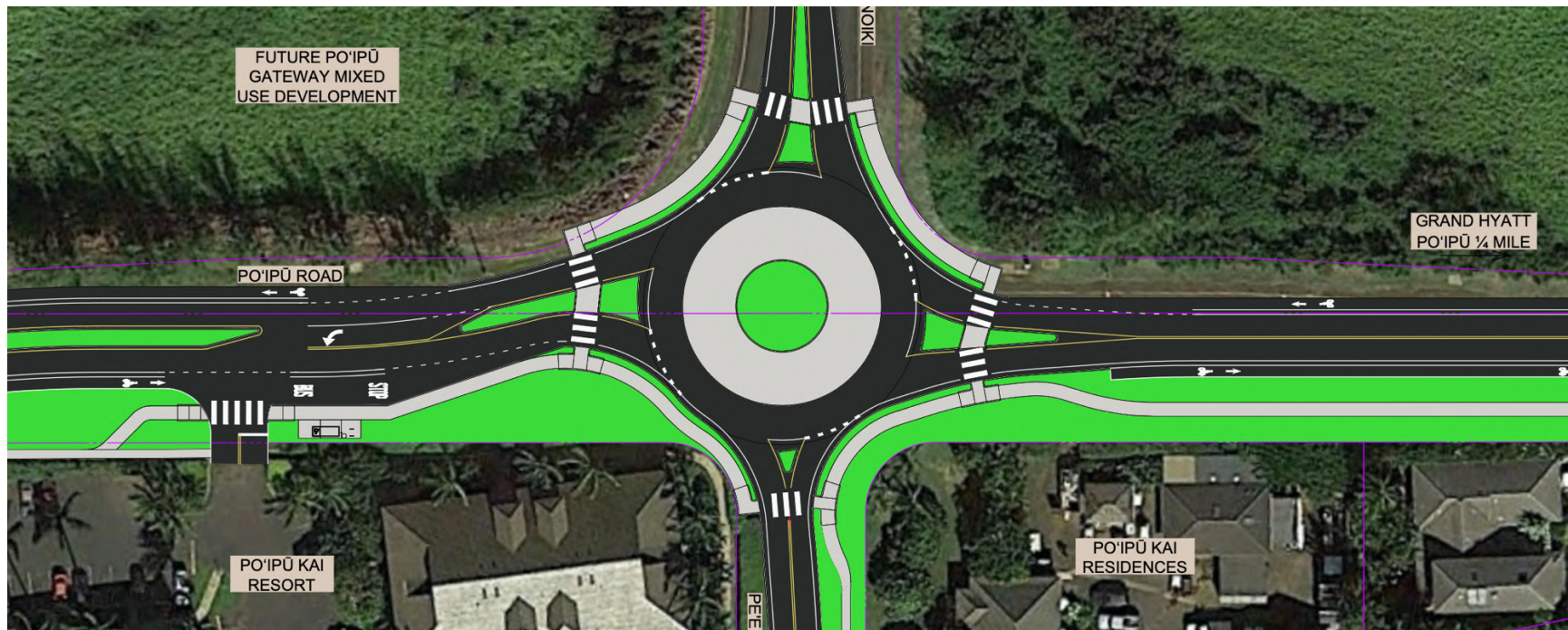


# Poipu Road Safety and Mobility Project

A USDOT BUILD Application by the County of Kauai, Hawaii • May 2020





**OFFICE OF THE MAYOR  
THE COUNTY OF KAUAI**

DEREK S. K. KAWAKAMI, MAYOR  
MICHAEL A. DAHLIG, MANAGING DIRECTOR

May 14, 2020

The Honorable Elaine Chao  
US Secretary of Transportation  
1200 New Jersey Avenue, SE  
Washington, DC 20590

**RE: POIPU ROAD SAFETY AND MOBILITY PROJECT - BUILD GRANT APPLICATION**

Dear Secretary Chao,

The application before you is the culmination of years of planning and design by the Kauai community in partnership with our County team. This rural project addresses our number one transportation priority: safety. At the same time, the Poipu Road Safety and Mobility Project will strengthen tourism, our most important economic sector, by providing safe, convenient, and affordable choices for employees to get to and from work in Kauai's premier resort destination. It will also unleash private investment to provide more workforce housing closer to work and serve as a catalyst for new businesses and jobs, including investment in one of our two Opportunity Zones.

While we are grateful that Kauai has been spared from the severe health impacts of the COVID-19 pandemic, our economy has been hard-hit. At 3%, the State of Hawaii had one of the lowest unemployment rates in the nation prior to COVID-19. Hawaii's unemployment rate now stands at 34%, one of the highest in the nation. This is primarily due to the significance of tourism for Hawaii's economy.

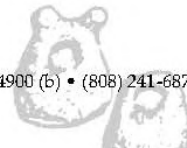
As we look at ways to diversify our economy, we must also do everything we can to bring tourism back in ways that are stronger, smarter, and more resilient than before, and that is exactly what this project accomplishes. If there ever were a time and place to invest in a transportation project that strengthens our local, state, and national economy, now is that time, Kauai is that place, and Poipu Road Safety and Mobility is that project.

*Imua!* (Move forward with strength!)

With aloha,



Derek S.K. Kawakami, Mayor



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**APPENDIX A: BENEFIT COST ANALYSIS** (Submitted as a separate document)

**SUPPORT DOCUMENTS**

Support documents such as detailed project engineering plans, schedule, and cost estimate, letters of support, environmental documents, and links to relevant planning documents can be found at the project website.

<https://www.kauai.gov/Government/Office-of-the-Mayor/BUILD-Grant>

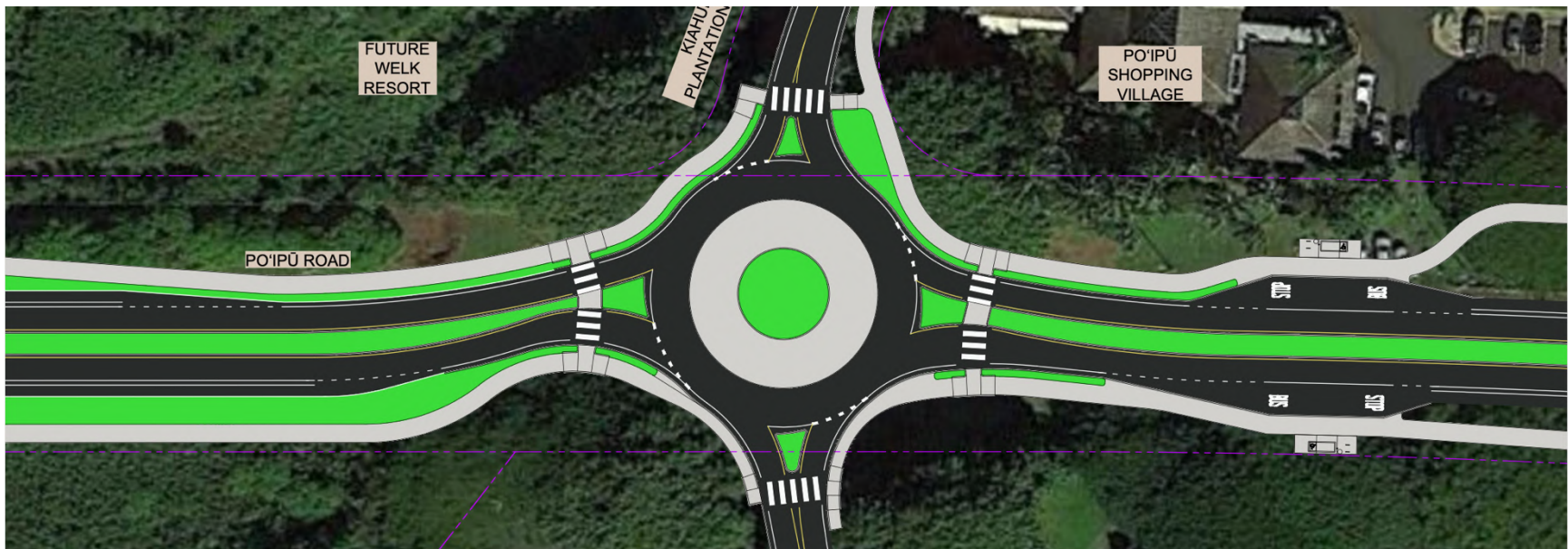


## PART 1: PROJECT DESCRIPTION

### Introduction

The County of Kauai is seeking BUILD funds to construct the Poipu Road Safety and Mobility Project. Poipu Road is an existing road, approximately 3.3 miles long, connecting the town of Koloa and the Poipu resort area. It is a thoroughfare serving both local and regional needs. Residential neighborhoods, Koloa Elementary School, a public library, churches, shops and services, visitor accommodations, and access to public parks and beaches are all along Poipu Road. It abuts one of Kauai's Opportunity Zones in the town of Koloa. This is a rural project with a total estimated cost of \$22,626,000. The local match is proposed to be \$2,262,600, or ten percent (10%) of the total project cost. The BUILD grant request is for \$20,363,400.

This project will connect places where people live to places where people work through a safe multimodal network. It will enhance the functionality and character of the main thoroughfare for Kauai's premier resort district, and it will provide the transportation infrastructure needed to unleash private investment for new mixed use, workforce housing, and resort development to strengthen Kauai's economy.



*Poipu Road at Kiahuna Plantation Drive Concept Plan*

## Challenges and Solutions

### *Safety and Mobility*

Currently, due to vehicle speeds on Poipu Road and lack of continuous sidewalks and bike lanes, it is difficult for most people in Poipu or Koloa to get to their destinations by any means other than driving, due to lack of facilities for walking and biking, as well as limited transit service. This impacts children who want to walk or bike to school, and adults who need to get to work, shops, and services. Traffic is congested on Poipu Road, especially in the vicinity of Koloa Elementary School during school pick-up and drop-off. While close in distance, the housing center of Koloa and the employment center of Poipu are not connected by a robust multimodal transportation network. Two-way stops at major intersections along Poipu Road in the resort district contribute to delay, safety concerns, confusion, and speeding on Poipu Road. Crosswalks along Poipu Road are not consistently well-located and vehicular travel speeds are not conducive to pedestrians crossing the street. Due to lack of continuous sidewalks and bike lanes, residents and visitors must walk or bike on the busy travel lanes or on inadequate grass or paved shoulders.

With the BUILD project, Poipu Road will be a safer street and mobility choices will be enhanced. This project will construct continuous bike lanes and improved pedestrian crossings on Poipu Road through Koloa town, connecting neighborhoods to Koloa Elementary School, shops, and services. Within the Poipu resort district, continuous sidewalks and bike lanes will better facilitate visitor travel between resorts and nearby shops, beaches and services, and for employees who live within walking or biking distance. The project includes roundabouts at two major intersections, left turn lanes at other intersections, a landscaped median to calm traffic, and improved pedestrian crossings with median refuges and rectangular rapid flashing beacons. Overall, travel speeds will be reduced, while travel time reliability will be improved. These improvements will enhance safety for all users, including motorists, bicyclists, and pedestrians.



*Wide travel lanes encourage speeding and the lack of bicycle and pedestrian facilities discourage mobility choices.*



From a mobility perspective, all modes of transportation will be improved: more reliability and less confusion for cars and freight; better connectivity for bicyclists and pedestrians; and improved transit access for both visitors and employees, through new bus stops with shelters, and improved first mile/last mile connections. The physical improvements will allow for planned expansion of transit service, connecting employees to work and connecting visitors to shops, beaches, and services.

### *Economic Development*

Tourism is Kauai's primary economic sector, and Poipu is Kauai's largest resort area, serving as an economic hub and employment center for the entire island. 18% of Kauai's jobs are found in South Kauai, and over 25% of Kauai's property tax revenue is generated in Koloa-Poipu. Getting between home and work is a challenge for many working in the visitor industry, due to the high cost of automobile ownership and limited affordable transportation alternatives. In addition to the challenge of employees getting to and from work, tourism on Kauai has been severely impacted by COVID-19.

The project will better connect workers with the employment center of Poipu. It will be a substantial investment in revitalizing the visitor industry on Kauai. It will provide a more functional, attractive, and context-sensitive street for a resort area that competes with international resort destinations, contributing to the tourism economy for Hawaii and the United States. The project will spur economic development through private investment in businesses serving both visitors and residents, along with investment in new workforce housing adjacent to the resort area. Transportation improvements that strengthen this economic sector, and provide better access for employees, are critical to the economy of Kauai, especially as a strategy for economic recovery and resilience following COVID-19.



*Poipu-Koloa is a major employment center and economic driver for Kauai.*



## Planning Context and History

The Poipu Road Safety and Mobility Project is consistent with and helps to implement several planning documents, including the South Kauai Community Plan (2015), the County of Kauai Short Range Transit Plan (2018), and the Hawaii Statewide Freight Plan (2018). From a regional transportation perspective, it is a key component of a transportation and freight network connecting the employment and resort centers of South Kauai to the island's main airport and harbor in Lihue. This project complements other in-progress or recently completed projects to improve the movement of people and goods along this regional transportation corridor. The project concept was developed through a robust community design effort.

### *South Kauai Community Plan*

<https://www.kauai.gov/Government/Departments-Agencies/Planning-Department/Long-Range-Division/South-Kauai-Community-Plan>

The Poipu Road Safety and Mobility Project is an identified capital project in the South Kauai Community Plan. The concept design was vetted through the community outreach process. In addition, the project provides the required transportation infrastructure to support increased residential and mixed use density in Koloa Town, increased affordable housing, new resorts, and a major new mixed use development, called the Poipu Gateway, focused on significantly increasing workforce housing at the intersection of Poipu Road and Ala Kinoiki, all as envisioned and approved in the Community Plan.



*View showing Poipu Road and the future Poipu Gateway development area*

### *Short Range Transit Plan*

<https://www.kauai.gov/Portals/0/Transportation/Kauai%20SRTP%20Final%20Report%202018.pdf?ver=2019-09-11-143326-030>

The County's Short Range Transit Plan lays out a new model for visitor travel. Currently, Kauai's resident population is about 72,000 and the number of visitors exceeds 1 million per year. On any given day, visitors comprise about one-third of the island's combined visitor and resident population. With 89% of visitors choosing to rent a car at the airport for the duration of their stay, a portion of the island's congestion is caused by visitor traffic. The Short Range Transit Plan proposes to change visitor travel patterns by having reliable and affordable shuttles between the airport and resort areas, shuttles within the resort areas, improved bicycle and pedestrian infrastructure within resort areas, and short term car rental or car-share available at resorts. Rather than renting a car for the duration of their stay and contributing to island-wide traffic, visitors would have plenty of transportation options within the resort area and would still have access to cars on a short-term basis when needed. The Poipu Road Safety and Mobility Project provides the needed infrastructure for this regional transportation model, including bus stops and shelters to support a revamped South Shore Shuttle between Koloa and Poipu, with links to the Kauai Bus mainline, serving both locals and visitors. The County has already gained experience in implementing this regional strategy with the launch of the North Shore Shuttle, which has greatly reduced traffic impacts on Kauai's North Shore. Completion of the Poipu Road Safety and Mobility Project is a critical next step in expanding this regional transportation model, replicating the success of the North Shore Shuttle in South Kauai.



*With no visitors due to COVID-19, unused rental cars fill vacant parking lots.*



*To reduce traffic congestion, visitor shuttles serving Poipu and Koloa are planned, similar to Kauai's North Shore Shuttle.*

### *Hawaii Statewide Freight Plan*

[https://hidot.hawaii.gov/highways/files/2019/03/HDOT\\_FreightPlan\\_FINAL.pdf](https://hidot.hawaii.gov/highways/files/2019/03/HDOT_FreightPlan_FINAL.pdf)

Poipu Road is a critical component of a regional transportation network to move goods to Koloa and Poipu from the main airport of Lihue, the main harbor of Nawiliwili, and the main town of Lihue where most commercial and industrial uses are located. Hawaii's Statewide Freight Plan identifies "rural connectivity" as an important statewide policy:

**Policy: Develop an equitable project prioritization process that recognizes the importance of rural connectivity.**

"Though traveled by fewer trucks, the rural network is almost as important [as urban centers] as it may connect the urban centers to each other, to ports, and to natural resources. The rural network also provides access to remote communities and tourist destinations that make Hawaii so attractive to tourists from around the world, supporting the overall economy. The following will help prioritize projects while maintaining rural connectivity:

- Continue to identify freight transportation issues critical to Hawaii's rural areas and invest in infrastructure improvements to enable the transport of food (agriculture), supplies, and other critical materials.
- Identify key routes on the Hawaii Freight Network that serve as critical connections to rural areas to provide agricultural and freight access to enhance economic vitality."

As a part of Kauai's rural freight network connecting Poipu and Koloa to the main airport and harbor in Lihue, Poipu Road is the only major road that has not been improved through a major repair or reconstruction project in recent years.

### *Poipu Road Design Charrette*

The vision for this project first emerged through an intense week-long community design charrette held in 2013. Over 200 people participated in the charrette, which was co-sponsored by the County and Get Fit Kauai. Many community partners supported the design effort, including the Koloa Community Association, Poipu Beach Resort Association, The Shops at Kukuiula, and Kauai Path. Through concept design and engineering, the design for Poipu Road has stayed remarkably close to the original concepts developed by the community through this charrette process. Community support for the project was confirmed through the South Kauai Community Plan, and then re-confirmed through a series of stakeholder and neighborhood meetings with business owners, managers, and residents in Poipu and Koloa in 2019 and 2020. A summary charrette report can be found at the project website <https://www.kauai.gov/Government/Office-of-the-Mayor/BUILD-Grant>.



### **Benefits to Rural Communities**

This project will have the following benefits for the rural communities of Koloa and Poipu, and all of Kauai:

- Access and connectivity will be improved to schools, services, shops, and jobs, especially for low-income neighborhoods.
- The economic sector of tourism will be strengthened, on which Kauai's economy depends.
- The project will be a catalyst for private investment in Koloa and Poipu, including in an Opportunity Zone.
- Safety will be enhanced for all roadway users.
- State of good repair improvements to the South Shore regional transportation and freight network will be completed.

### **Statement of Work**

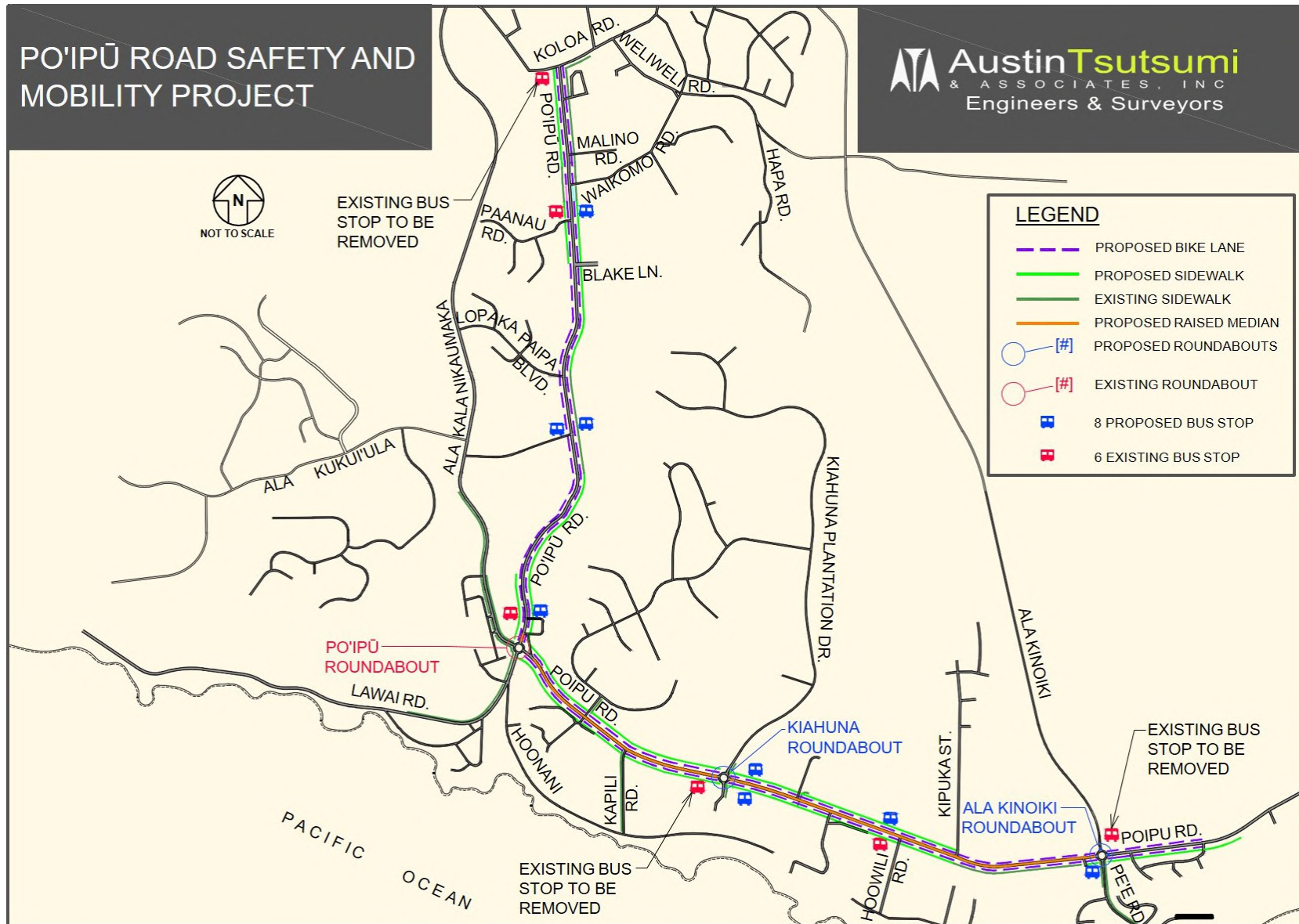
The project includes the following improvements. 30% engineering plans may be found at the project website.

- Roadway resurfacing, reconstruction, or construction of new roadway along the entire length of the project, approximately 3.3 miles.
- Continuous sidewalks along both sides of the street for 1.5 miles, and a sidewalk on one side of the street for 1.25 miles.
- Two new roundabouts at the intersections of Poipu Road with Kiahuna Plantation Road, and the intersection of Poipu Road with Ala Kinoiki and Pee Road. Both roundabouts will include four crosswalks with median refuges.
- Left turn lanes at all other intersections and driveways along Poipu Road between Lawai Road and Ala Kinoiki.
- Construction of paved shoulders to be marked as bike lanes.
- 11 crosswalks at uncontrolled locations with rectangular rapid flashing beacons; 5 of the crosswalks will have median refuges.
- 11 bus stops with bus shelters and amenities such as trash receptacles and bike racks; 7 of the bus stops will have bus turnouts.
- Drainage and swale improvements
- Medians for approximately 1.15 miles
- On-street parking improvements at select locations
- Landscape planting and irrigation
- Relocation of utilities as needed
- Relocation of private signage at Kiahuna Plantation Drive
- Striping and signage

All roadway features, including roundabouts, will be designed to accommodate transit and freight vehicles. The design vehicle for roundabout turning movements (using a truck apron) is the WB-50 vehicle. The posted speed limit is 25 mph.

The following pages provide a graphic overview of the project and illustrate typical project segments.

## Project Overview Map





## Typical Segment Concept Plans



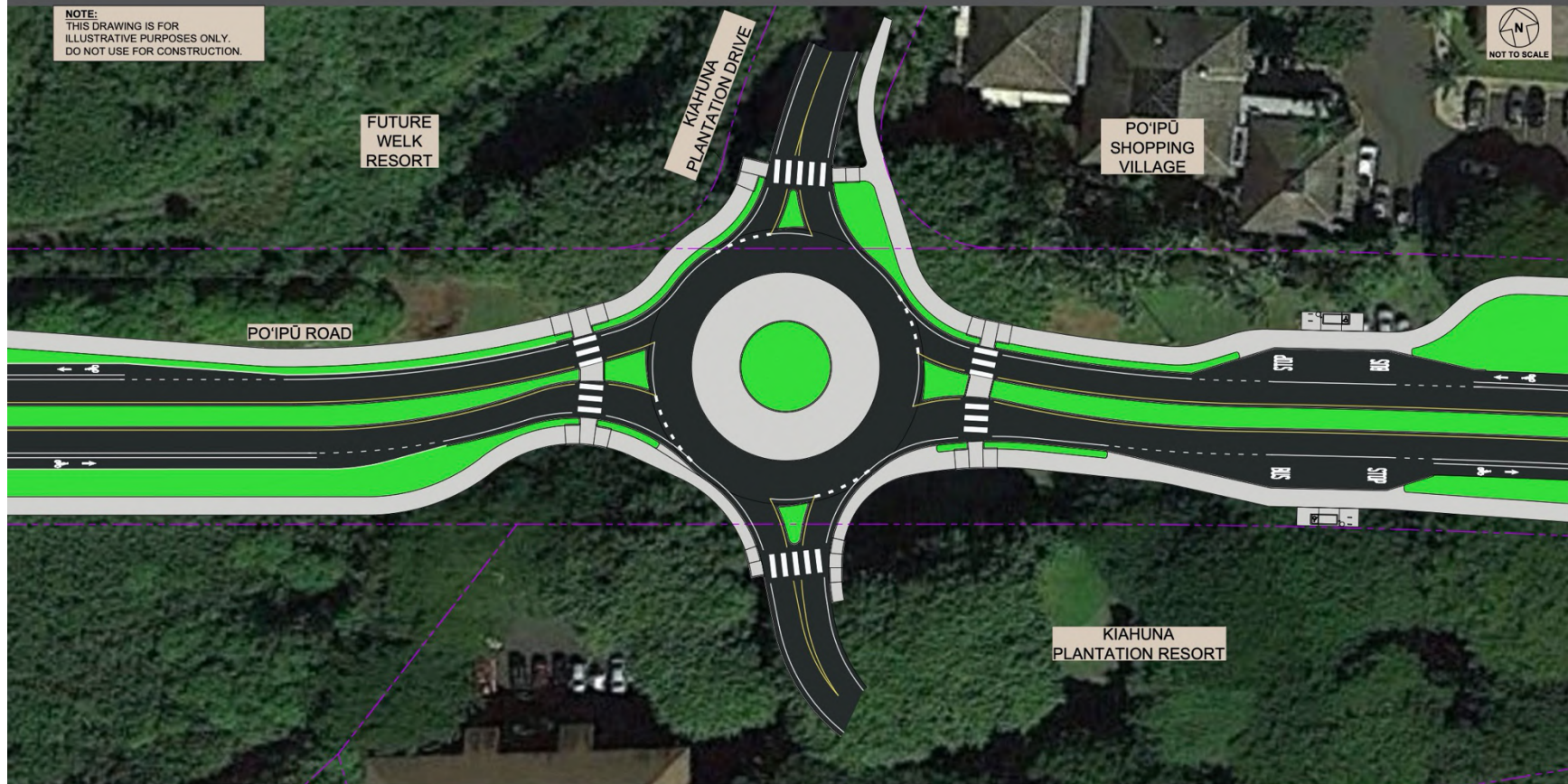
*Poipu Road Concept Plan in Koloa Town in the vicinity of Koloa Elementary School*



## PO'IPŪ ROAD SAFETY AND MOBILITY PROJECT

**AustinTsutsumi**  
& ASSOCIATES, INC.  
Engineers & Surveyors

NOTE:  
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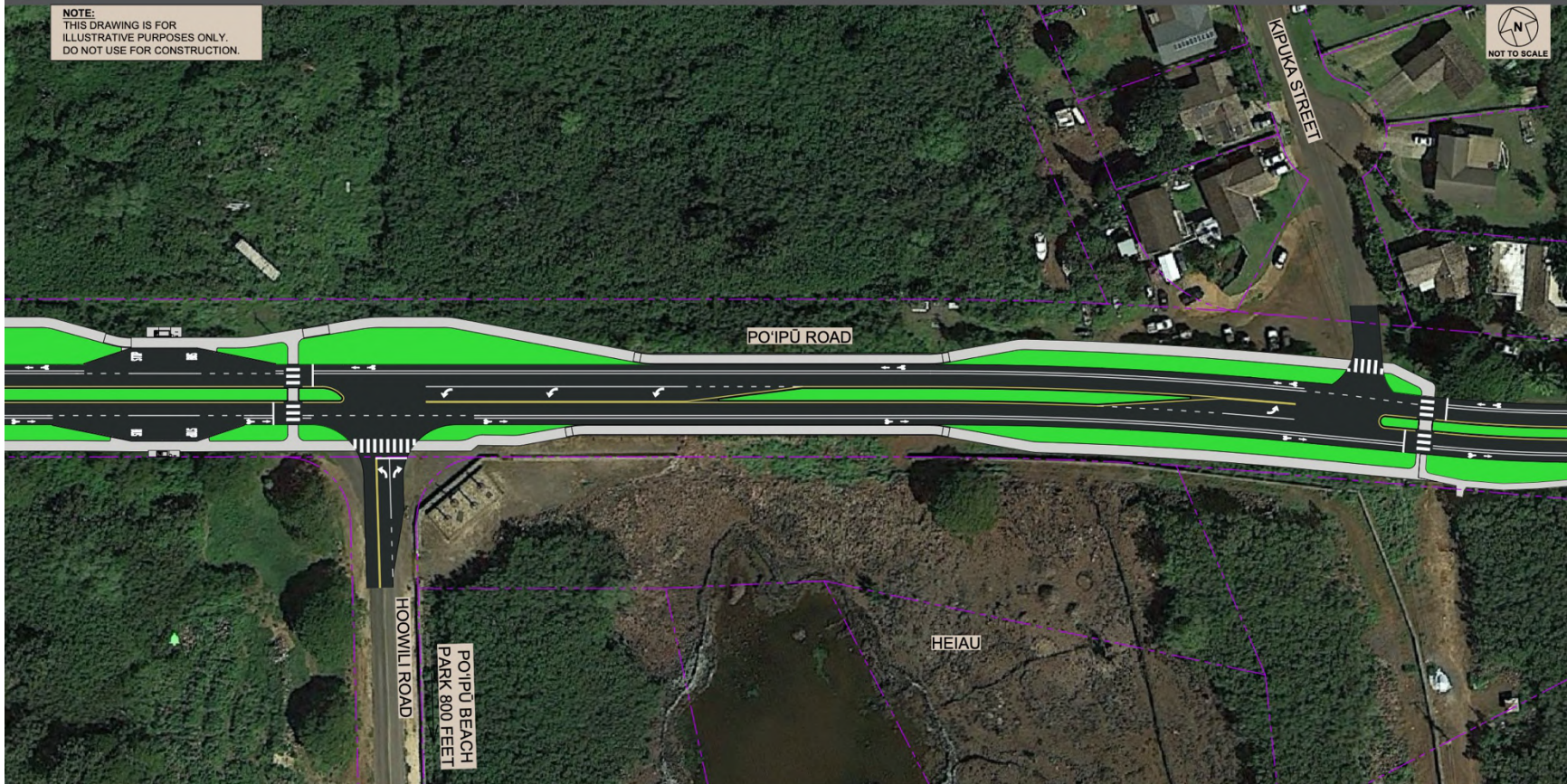
*Poipu Road Concept Plan at the intersection with Kiahuna Plantation Drive*



## PO'IPŪ ROAD SAFETY AND MOBILITY PROJECT

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*Poipu Road Concept Plan between Hoowili Road and Kipuka Street*



## PO'IPŪ ROAD SAFETY AND MOBILITY PROJECT

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Engineers & Surveyors

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FUTURE PO'IPŪ  
GATEWAY MIXED  
USE DEVELOPMENT

GRAND HYATT  
PO'IPŪ ¼ MILE

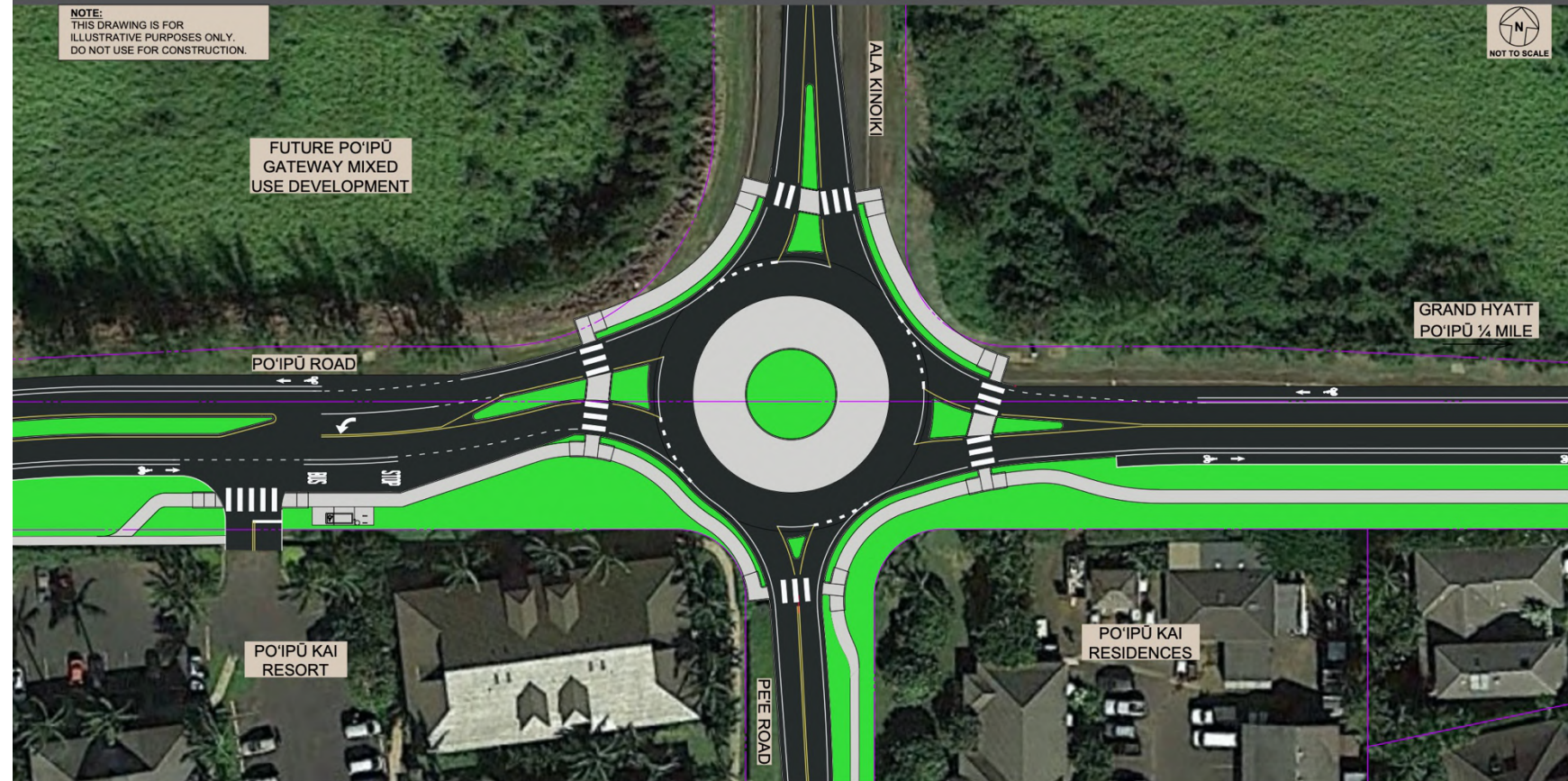
PO'IPŪ ROAD

ALA KINOIKI

PO'IPŪ KAI  
RESORT

PE'E ROAD

PO'IPŪ KAI  
RESIDENCES



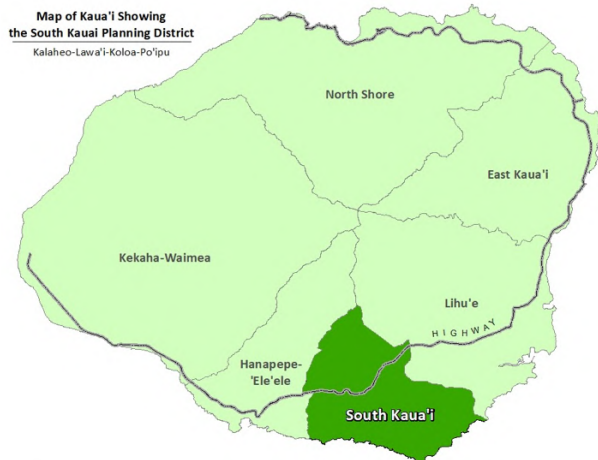
*Poipu Road Concept Plan at the intersection with Ala Kinoiki and Pe'e Road*



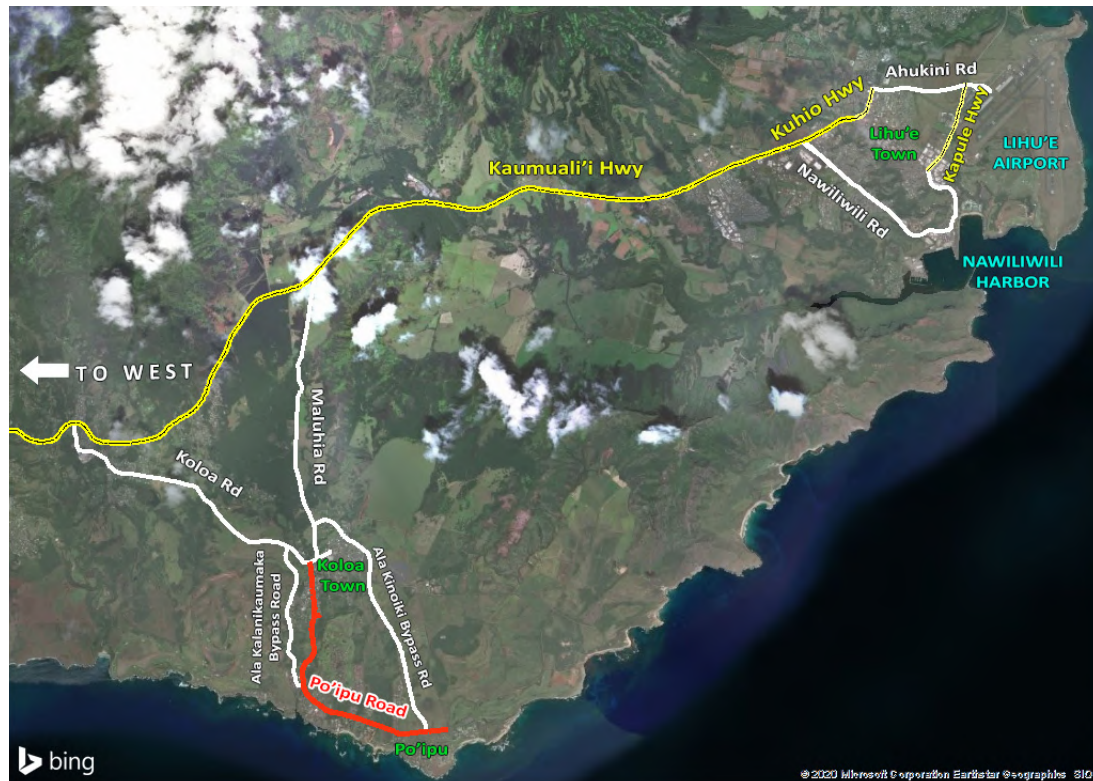
## PART 2: PROJECT LOCATION

The project is located within the State of Hawaii, County of Kauai, in the South Kauai Planning District. It begins in the town of Koloa and ends in the resort district of Poipu. Kauai County is the local jurisdiction; there are no incorporated cities or towns within the County. The project centerline begins at N21°54'13" W159°28' and ends at N21°52'35.7" W159°26'29".

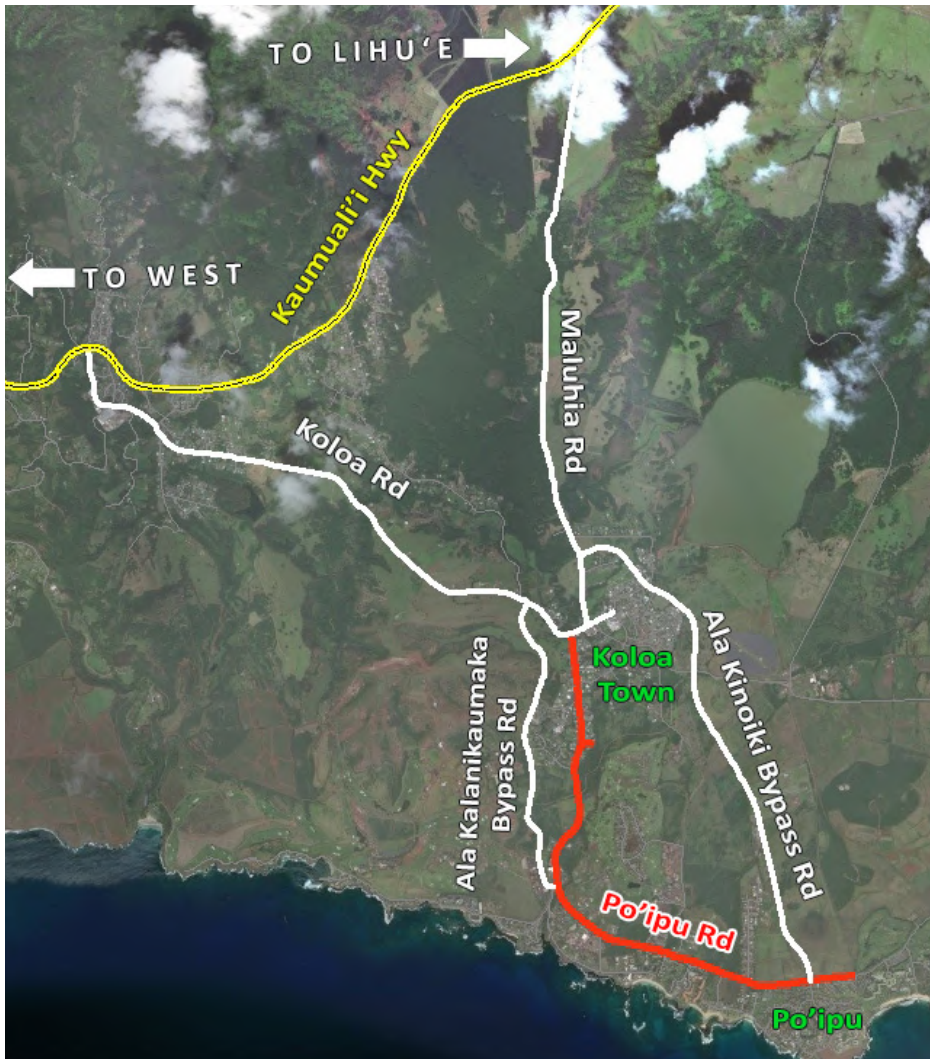
A portion of Poipu Road is the partial border of Opportunity Zone 15007040604. Existing land uses adjacent to Poipu Road include housing (including the new Koae Makana affordable housing project nearing completion), churches, commercial uses including restaurants and retail, services, a public school and library, and visitor accommodations. Future land uses include increased residential density in Koloa, and additional resorts and mixed-use development in Poipu. The increased residential density in Koloa and mixed-use development in Poipu will expand workforce housing.



Map of Kauai with South Kauai Planning District



Regional freight network map highlighting Poipu Road (in red)



South Kauai regional transportation map



Poipu Road (red) and Opportunity Zone (yellow)



### PART 3: GRANT FUNDS, SOURCES, AND USES OF PROJECT FUNDS

The total project cost is estimated at \$22,626,000. This includes all construction items, project mobilization, a five percent (5%) construction contingency, and construction management/engineering support during bidding and construction. BUILD funds of \$20,363,400 are requested toward these costs. A ten percent (10%) local match of \$2,262,600 in County funds will be used for this project. The sources of these local funds include \$253,182 previously received by the County from developers in the Koloa-Poipu area for transportation improvements, and \$2,009,418 from the County's General Excise Tax (GET) transportation surcharge. The County's GET transportation surcharge generates over \$20 million annually. Most of these funds are used for maintenance and resurfacing of County roads and bridges and operation of our local transit system, however, these funds may also be used as a local match for federally-funded transportation projects. The account numbers and balances for these local funds can be found on the project website. All of these local funds are eligible to be spent on any aspect of the project. There are no restrictions as to when they are spent in relation to this project. The match amount has been approved by County Council. The County has sufficient funds and experience with Federal-Aid projects to operate on a reimbursement basis for the Federal share of the project.

#### Project Revenues

Description	Federal Funds	Local Funds	Total
BUILD funds	\$20,363,400		
Development funds for transportation		\$253,182	
GET surcharge		\$2,009,418	
Total	\$20,363,400	\$2,262,600	\$22,626,000

#### Project Expenses

Description	Federal Portion	Local Portion	Total
Construction	\$16,864,200	\$1,873,800	\$18,738,000
Contingency (5%)	\$843,300	\$93,700	\$937,000
Construction Engineering and Management	\$2,655,900	\$295,100	\$2,951,000
Total	\$20,363,400	\$2,262,600	\$22,626,000



## PART 4: SELECTION CRITERIA

### Primary Selection Criteria

#### *Safety*

An analysis was done of all reported crashes within the project area from 2006 to 2012. This is the most recent data available that includes detailed information on crash type, severity, and location. During this time, there were a total of 54 reported crashes along the corridor. Of these, 3 crashes resulted in incapacitating injury, 15 resulted in non-incapacitating injury, 17 resulted in possible injury, and 19 were property damage only. The most severe crash types included a head-on collision, a roll-over, and a crash into a tree. Most of the crashes were single motor vehicle crashes or were crashes between motor vehicles. There were four crashes involving mopeds or bicycles. 28 crashes were at intersections.

Countermeasures have been incorporated into the project to address safety concerns for all modes of travel. The countermeasures include the following:

- Roundabouts at two intersections - reduce head-on, broad-side, and side-swipe crashes, reduce crashes where speed is a factor
- Left turns lanes at other street intersections and driveways - reduce head-on, side-swipe, and rear-end crashes
- Medians - reduce head-on, broad-side, and side-swipe crashes, reduce fixed-object, run-off-the-road, and other crashes where speed is a factor
- Continuous sidewalks – reduce conflicts between pedestrians and vehicles
- Pedestrian crossings with rectangular rapid flashing beacons and medians – reduce conflicts between pedestrians and vehicles
- Paved shoulders marked as bike lanes – reduce head-on, broad-side, side-swipe, fixed object, and run-off-the-road crashes; reduce conflict between bicyclists, pedestrians and motor vehicles

Based on the crash history and project countermeasures, crash modification factors (CMFs) were identified using FHWA's CMF Clearinghouse at <http://www.cmfclearinghouse.org>. Based on this analysis, it is anticipated that the project will reduce overall crashes by 27.8 percent and injury crashes by 28.2 percent. Based on the benefit cost analysis, the overall safety cost benefit of the project is estimated at \$1,818,066.

### *State of Good Repair*

With many potholes and damaged pavement, the entire length of Poipu Road is in need of resurfacing or reconstruction. Its existing pavement condition was rated “fair” and “poor” in 2017, with only occasional pothole patching since then. This project will provide pavement repair based on existing conditions, including resurfacing, reconstruction where needed, and new pavement due to realignment, addition of turn lanes and roundabouts, and the addition of medians, bike lanes, and paved shoulders. With this project, Poipu Road will be suitable to enter into the County’s regular road resurfacing program, to be resurfaced about every 10 years, without the extreme cost of reconstruction. The County has acquired pavement management software and has initiated a pavement management program to better keep up with road maintenance before roads fall into serious disrepair.

In addition, the project will provide new roadway striping and signage that will further enhance the state of good repair.

### *Economic Competitiveness*

With a resident population of about 72,000, and an annual visitor population exceeding 1,000,000, tourism is Kauai’s main industry, and Koloa-Poipu is the island’s premier resort destination. Based on 2010 census data, nearly 1 in 5 jobs on Kauai are found in South Kauai. According to the 2019 Visitor Plant Inventory (Hawaii Tourism Authority) <https://www.hawaiitourismauthority.org/media/4085/2019-visitor-plant-inventory-report-final-rev.pdf>, almost 40 percent of Kauai’s visitor units are located in the Koloa-Poipu area. Based on October 2019 tax assessment data for the 2020 tax year, Koloa-Poipu will contribute \$38.8 million, or just over 25%, of the County’s total property tax revenue of \$154.5 million.

Poipu Road serves as the gateway and main thoroughfare through the resort district. Currently, Poipu Road is aging with little distinctive character to reflect the resort district’s distinctive role as a key economic driver. Along with important safety improvements, the project will transform Poipu Road with landscaped medians and roundabouts that reflect the resort area’s significance. In addition, Poipu Road’s redesign will make the resort area more competitive by providing transportation choices for visitors, including walking, biking, and local shuttles to get to shops, neighboring towns, beaches, and other attractions. With transportation alternatives, the project will support Kauai’s marketing as a destination for eco-tourism. In addition, the project will be a catalyst for private investment in existing and new businesses, including resorts, restaurants, retail shops, services, and private transportation services such as shuttles and transportation network companies, bike rental and bikeshare. It will also increase the attractiveness of investment within the Opportunity Zone.

The project will provide the needed safety and congestion management improvements (roundabouts, left turn lanes, sidewalks, and bike lanes) to support increased density in existing neighborhoods such as in Koloa town, and development of new neighborhoods, such as the proposed mixed-use Poipu Gateway, as envisioned in the South Kauai Community Plan. This increased density will

provide much-needed workforce housing within walking and biking distance of Poipu, better linking employees to a vital employment center.

This project will also benefit local employees of the visitor industry. For most workers, the only way to get to and from work is by driving a personal automobile, one of the most expensive modes of transportation. Kauai has some of the highest per capita housing plus transportation costs in the United States, ranging from 56% to 74% of income within the project area (<https://htaindex.cnt.org/map/>). With new bike lanes and sidewalks, those who live in Koloa will be able to walk or bike to work, and those who live further away will have the option of taking transit, with improved transit service as outlined in the Short Range Transit Plan, and improved first-mile last-mile connections. Providing more transportation choices can reduce personal expenses, increasing savings and disposable income for local workers.

In addition to better moving people, the project will also improve the movement of goods. As a main thoroughfare, Poipu Road is an integral component of South Kauai's freight network, connecting South Kauai to the main airport and harbor in Lihue. Nearly all of this network has recently been upgraded and resurfaced, or is slated for resurfacing this year, with the exception of Poipu Road. Safety and state of good repair improvements to Poipu Road will complete the maintenance improvements to this regional freight network.

### *Environmental Sustainability*

While the project will increase impermeable surfaces through the addition of roadway pavement and sidewalks, stormwater runoff will be managed primarily through vegetated swales that filter and direct stormwater to recharge the groundwater supply. Increased permeable surfacing will be offset by landscaped medians and shoulder-adjacent swales so that the risk of flooding will not be increased. Carbon emissions will be reduced through increased use of walking, bicycling, and transit, and through intersection modifications (roundabouts and left turn lanes) that reduce vehicle idling. The addition of landscaped medians with shade trees will allow for additional carbon capture and will reduce the heat island effect of the roadway.

### *Quality of Life*

By reducing congestion and adding sidewalks, bike lanes, and improved bus stops, this project increases transportation choice for local residents of Koloa and Poipu. This includes access to jobs and services in Koloa town, a safer route for children who live bicycling or walking distance to Koloa Elementary School, and access to the many visitor-industry jobs in Poipu. Employees will have the choice to minimize commuting by single-occupancy autos, instead using more affordable transportation options, which will provide more personal savings and disposable income. This is especially important in the rural community of Kauai where the



housing plus transportation costs for local residents are extremely high. The project will also provide access to a planned regional park in Koloa within the Opportunity Zone, across Poipu Road from Koae Makana affordable housing.

By improving access to active transportation options such as walking and biking, the project will contribute to improved health outcomes for local residents by allowing for physical activity to be incorporated into daily life. Improving the transportation infrastructure to support active transportation is a primary goal of Hawaii's Physical Activity and Nutrition (PAN) Plan. Objective 3 and 4 of the PAN Plan are noted below. This project addresses both of these objectives.

*Objective 3: Develop and implement processes at the state and by every county to include physical activity priorities when determining building design and location, land-use planning, and transportation decisions.*

*Objective 4: Increase by 10% the percentage of people who use active transportation to commute to work or school by expanding opportunities for active transportation (e.g., bike share programs, public transit, transit-oriented development, Safe Routes to School, Work and Recreation).*

For visitors, increased transportation choice will enhance their experience by providing opportunities for physical activity and recreation while exploring the resort area. In addition, the safety improvements will reduce stress for visitors when navigating the resort area.

## **Secondary Selection Criteria**

### *Innovative Financing*

Most of the County's local match will be funded through the County's General Excise Tax (GET) surcharge for transportation. Recognizing the shortfall in funds for local transportation projects, the State of Hawaii authorized counties to assess a GET surcharge of up to 0.5% to be used for transportation within the county where the surcharge is collected. The Kauai County Council approved the surcharge in 2017, and the County started collecting this surcharge in 2019.

In addition, a portion of the local match is from funds received from developers to be used in the Poipu-Koloa area for transportation improvements. For long-term maintenance once the project is complete, resort and property owners have agreed to join together and maintain the project's landscaped medians, roundabouts and swales fronting their property.

### *Partnership*

The following project parties have participated and will continue to contribute to the success of this project:

#### **County of Kauai**

The project applicant is the County of Kauai Department of Public Works (DPW). The project will be managed by the DPW Engineering Division. The Engineering Division currently manages roadway engineering and construction projects, including Federally funded projects on the State Transportation Improvement Program (STIP) and the County's current TIGER project, which will be substantially complete on May 25, 2020. The Engineering Division will be supported by other DPW divisions and other County departments, including DPW Roads Division, DPW Fiscal Division, DPW Administration, Planning Department, Office of Economic Development, Transportation Agency, Kauai Police Department, Kauai Fire Department, Kauai Department of Water, and the Office of the Mayor.

<http://www.kauai.gov/>

#### **Hawaii Department of Transportation (HDOT)**

HDOT will have project and funding oversight responsibilities. Through past STIP projects and the TIGER project, the County has an excellent working relationship with HDOT.

<http://hidot.hawaii.gov/>

#### **Hawai'i Department of Education (DOE)**

DOE owns and operates Koloa Elementary School on Poipu Road. The County has strong partnership with DOE through Safe Routes to School projects and programs.

<http://www.hawaiipublicschools.org/Pages/home.aspx>

#### **Get Fit Kauai (GFK)**

Get Fit Kauai is a community coalition that serves as a bridge-builder between Kauai residents and County and State government, focusing on building a healthier community. GFK is funded by the State of Hawaii Department of Health, Kaiser Health, and Hawaii Pacific Health. Two of GFK's task forces have been actively involved with the development of this project: the Built Environment Task Force and the Safe Routes to School Task Force. GFK sponsored the original Poipu Road design charrette and will continue to assist with public outreach through construction.

<http://getfitkauai.com/>

### Kauai Path

Kauai Path is an advocacy group supporting improved bicycle and pedestrian infrastructure on Kauai. Kauai Path participated in the Poipu Road design charrette and continues to be a project supporter.

<https://www.kauaipath.org>

### Koloa Community Association (KCA)

The KCA participated in the original Poipu Road Design Charrette and has hosted meetings in 2019 to review the preliminary engineering drawings. They will continue to be a partner in community outreach.

### Kauai Visitors Bureau

The Kauai Visitors Bureau is an important partner for all aspects of the visitor industry on Kauai. They provide a liaison to the resort community in Poipu and will continue to be a partner in this project.

<https://www.gohawaii.com/islands/kauai>

### Private Property Owners and Resorts

Numerous property owners, resorts, and homeowner associations in Poipu and Koloa have been involved in the project design. Resort and property owners have agreed to maintain the landscape fronting their property on Poipu Road.

Letters of support from project partners are found at the project website.





## PART 5: ENVIRONMENTAL RISK

### Project Schedule

A detailed project schedule may be found at the project website. A summary of key project milestones is included below.

Description	Start Date	End Date
30% PS&E	Complete	Complete
Section 7 Compliance	7/6/18	9/10/20
Section 106 Compliance	12/6/19	9/15/20
Cat Ex	9/16/20	12/8/20
60% PS&E	7/13/20	10/15/20
90% PS&E	10/16/20	12/17/20
100% PS&E	12/18/20	2/17/21
Final Obligation Package	2/18/21	5/20/21
HDOT/FHWA Review & Funding Obligation	5/21/21	9/9/21
Bidding	10/22/21	12/10/21
Award	12/13/21	12/13/21
Notice to Proceed	12/14/21	3/1/22
Construction	5/2/22	12/7/23
Substantial Completion	9/19/23	9/19/23
Final Acceptance	9/20/23	12/7/23
Landscape Maintenance	12/8/23	8/15/24
Project Closeout	8/16/24	1/30/25

### Required Federal Approvals

#### NEPA

All work is in areas that have been previously disturbed. A NEPA Categorical Exclusion (CatEx) is anticipated. All of the similar federally funded County projects have had a CatEx, and we are not aware of any conditions on this project that would result in a different outcome.

### Section 106

The Section 106 process has been initiated. Given that all of the work is in previously disturbed areas, a Section 106 “no adverse effect” finding is anticipated for this project. Literature research has shown that all known sensitive archeological or historical resources are outside of the Area of Potential Effect (APE). Should archeological features be discovered during construction, normal protocols will be followed in compliance with State law.

### Section 7

Consultation with the US Fish and Wildlife Service (USFWS) has been undertaken, and a final concurrence letter is being drafted for FHWA to submit to USFWS. The finding for which concurrence is being requested is that the project may affect, but is not likely to adversely affect, listed species.

### National Pollutant Discharge Elimination System (NPDES)

Given the use of stormwater filtration through bioswales, we do not anticipate any issues with receiving a NPDES permit.

### Section 404

A Section 404 permit is not required for this project.

### Section 4(f)

This project does not include construction on any Section 4(f) lands.

### Federal Consistency Review by the State of Hawaii Coastal Zone Management (CZM) Program

The scope of this project is not subject to Federal Consistency Review.

### Environmental Documents

Environmental documents can be found at the project website and include the following:

- Section 106 correspondence
- Section 7 correspondence
- Project Draft Traffic Impact Analysis Report (TIAR)

### Discussions with HDOT and FHWA

This project is currently on the STIP: Project #STP-0520(004), Poipu Road (Route 520) Multimodal Improvements, and as such both HDOT and FHWA Honolulu are familiar with the project and have provided oversight. HDOT has reviewed and approved the consultant procurement process and environmental documentation. FHWA is the lead agency for the federal environmental process, and therefore, is familiar with the project and the steps taken thus far. The project is being designed to standards that are acceptable to HDOT and FHWA.

### Public Engagement

This project was conceptually designed by the community during a design charrette in 2013, led by nationally known consultants Dan Burden and Michael Moule (now the Chief of the Engineering Division of the County's Department of Public Works) and co-sponsored by the County and Get Fit Kauai. The concept was further vetted by the community during the South Kauai Community Plan in 2015. In 2019 and 2020, stakeholders reviewed the conceptual engineering plans in meetings with resort and property owners and with the Koloa Neighborhood Association. There continues to be overwhelming support for the project, with the community driving the design decisions since the initial charrette.



*A walk audit during the 2013 Poipu Road Design Charrette*



## **State and Local Approvals**

### **Hawaii Disability and Communication Access Board (DCAB)**

The project will be compliant with all DCAB requirements, and final construction documents will be reviewed by DCAB. We do not foresee any issues in obtaining DCAB compliance.

### **Hawaii Revised Statutes (HRS) Chapter 343**

The project qualifies for exemptions from State environmental review in conformance with Hawaii Revised Statutes Chapter 343.

### **Hawaii Revised Statutes (HRS) Chapter 6E**

Chapter 6E is the state equivalent of Section 106. The County will pursue Chapter 6E review and clearance in parallel with Section 106 and anticipates similar findings of no adverse effect.

### **Special Management Area (SMA)**

A portion of Poipu Road falls within the Special Management Area for the County of Kauai and will require an SMA Determination and possible permitting. The County's Planning Department is the review agency. Initial conversations have indicated that the project will comply with SMA requirements.

### **County Construction Permits**

Local permits will be obtained by the contractor prior to proceeding with the construction work.

## **Environmental Risk Summary**

In summary, there are no known environmental or permitting issues that would cause a delay in securing obligation of funds before September 2021.

## **State and Local Planning**

This project is already listed on the STIP: Project #STP-0520(004), Poipu Road (Route 520) Multimodal Improvements) It is also listed in the South Kauai Community Plan. Poipu Road is included in the Hawaii Statewide Freight Plan and the project is included in the Federal Aid Highways 2035 Transportation Plan for the District of Kauai.

### Assessment of Project Risks and Mitigation Strategies

Risk	Mitigation Strategy
Unknown environmental issues extend NEPA process	Project construction is in previously-disturbed land. ROW issues are limited to rights of entry for construction. The project schedule includes contingency time in the event a process is delayed.
Unknown historical/cultural resources extend the Section 106 process	All construction work is in previously disturbed areas. Archeological monitoring may be a condition, but that would not delay fund obligation. The project schedule includes contingency time in the event a process is delayed.
There is a protest during bidding	Procurement policies/procedures and bidding templates already approved by HDOT and FHWA and used successfully by the County without protest will be followed, minimizing likelihood of protest.
A financial crisis causes loss of funding.	County Council has already approved the grant application. The local match funding sources (development impact fees and GET transportation surcharge) can only be used for transportation projects and cannot be transferred to the General Fund.
The project is over budget.	Contingency funds are included in the cost estimates. Cost estimates are based on recent construction projects. Value engineering can occur during final design if needed.
County Council has a change of heart regarding project design.	County Council has already approved the grant application. The design is a result of extensive community input and is included in Council-approved plans.
A natural disaster delays construction.	The project schedule shows 20 months between the end of the project and the statutory deadline for project completion, which allows time should the project be delayed for reasons beyond the applicant's control.

## PART 6: BENEFIT COST ANALYSIS

The Benefit Cost Analysis examined quantitative and qualitative benefits in the areas of safety, economic competitiveness, operating cost savings, environmental sustainability, and quality of life. The full BCA can be reviewed at the project website, or in Appendix A. Project costs and benefits have been discounted as noted in the BCA guidance. The total discounted benefits are estimated at \$133,770,335. The discounted project cost is estimated at \$20,181,961. The benefit/cost ratio is estimated at 6.6.

### Safety

The quantitative safety benefit examined potential crash reductions based on crash history along Poipu Road. Safety countermeasures are included in the project, and crash modification factors were developed for each crash type based on the safety countermeasure. Each injury type was given a monetary value, and the reduction on crash type and/or severity provided a monetary value for the average annual reduction in crashes. The discounted crash reduction benefit over the 20-year project life is estimated at \$1,818,066.

The qualitative safety benefit is providing a safer environment for walking and biking. People do not currently feel safe to walk and bike due to a lack of bicycle and pedestrian infrastructure. Based on experience in other parts of the island where bike and pedestrian infrastructure has been improved, we believe that there is a latent demand for walking and biking in Koloa and Poipu. Anecdotal evidence of more local residents walking and biking on Poipu Road due to the significant reduction in visitor traffic during COVID-19 further confirms this latent demand. The improved transportation infrastructure will increase walking and biking.

### Economic Competitiveness

The quantitative economic competitiveness benefit evaluated the value of land with and without the project. The transportation infrastructure being built through this project will allow the intensification of density in Koloa town and some areas of Poipu, and will allow a new mixed use neighborhood to be developed in Poipu. While some development would occur without the project, much cannot occur without the congestion relief and safety improvements in this project. The analysis looked at existing land values vs. the higher land values associated with zoning changes that would be enabled by this project. The discounted total land value benefit of this project is estimated at \$123,872,357.

The qualitative economic competitiveness benefit is that this project will be a catalyst for private investment leading to new jobs in resorts, shops, restaurants, services, and private transportation.



### Operating Cost Savings

The quantitative operating cost savings benefit calculates the reduction in vehicle operating costs due to the reduction in vehicle miles travelled (VMT). Projected reduction in VMT is based on the project infrastructure improvements, increased workforce housing closer to jobs, and the County's General Plan and Multimodal Land Transportation Plan, which estimate projected VMT reductions based on land use changes and mode shift. The discounted value of operating cost savings is estimated at \$7,866,758.

Kauai County General Plan:

<https://www.dropbox.com/s/ptm72sqtikcn5kb/Kauai%20Kakou%20General%20Plan%202018%20Online.pdf?dl=0>

Multimodal Land Transportation Plan:

<https://www.kauai.gov/Portals/0/Transportation/Kauai%20MLTP%20Council%20Adopted%20Version.pdf?ver=2019-09-25-065400-817>

### Environmental Sustainability

The quantitative environmental sustainability benefit is the reduction in vehicle emissions due to anticipated reduction in vehicle miles travelled (VMT). See Operating Cost Savings above for methodology used to calculate VMT reduction. The discounted value of the vehicle emissions reduction is estimated at \$213,154.

The qualitative environmental sustainability benefits include stormwater filtration and groundwater recharge through the use of bioswales, carbon capture through the planting of medians with trees, and reduction in the heat island effect through tree planting.

### Quality of Life

The qualitative benefits for quality of life include the reduction of personal transportation costs by being able to walk, bike, or take transit to work, the health benefits of incorporating physical activity into daily life through active transportation, and the reduction in stress for all roadway users by having safer streets for all modes of transportation.



## EPILOGUE: COVID-19

The USDOT BUILD Grant website states the following: “Please identify any area(s) in the application narrative that may be affected by the ongoing COVID-19 situation for the Department’s consideration in the project’s evaluation.”

Fortunately, COVID-19 did not significantly impact the County’s ability to complete this BUILD application and COVID-19 is not anticipated to impact our ability to deliver the project. The project schedule (page 22) and mitigation strategies for project risk (page 26) provide ample cushion to complete the project within statutory requirements should unforeseen circumstances arise.

Nevertheless, due to COVID-19, the significance of the Poipu Road Safety and Mobility Project for the health and economic vitality of Kauai and the State of Hawaii has never been more apparent. At 3%, the State of Hawaii had one of the lowest unemployment rates in the nation prior to COVID-19. Hawaii’s unemployment rate now stands at 34%, one of the highest in the nation. This is primarily due to the significance of tourism for Hawaii’s economy, which has been brought to a standstill.

<https://www.usatoday.com/story/news/nation/2020/05/10/hawaii-coronavirus-travel-restrictions-trigger-record-unemployment/3093887001/>

Koloa-Poipu is the County of Kauai’s premier resort destination, providing nearly 20% of Kauai’s jobs, over 25% of its property tax revenue, and 38% of Kauai’s visitor lodging units. Koloa-Poipu is the heart of Kauai’s most vital economic sector. As we reopen our economy, in addition to providing important safety and mobility improvements, this project is also a major catalyst for private investment in new businesses and workforce housing to make our economy stronger, smarter, and more resilient than before.



*First responders and community residents participated in the Poipu Road Community Design Charrette.*